

Appl. No. : 09/905,335
Filed : July 13, 2001

AMENDMENTS TO THE CLAIMS

Please cancel Claims 1-8, 33-36, and 44-46.

Please amend Claims 37, 38 and 40 as indicated below.

Claims 1-36 (Canceled)

37. (Currently Amended) ~~A method according to claim 1 further comprising the step of~~ A method for depositing a conductive material in cavities of a substrate having a barrier layer and a seed layer formed thereon, the method comprising the steps of:

removing certain portions of the seed layer from the top surface of the substrate using a pad material while preventing removal of other portions of the seed layer from the cavities of the substrate by applying an electric potential between the substrate and an electrode;

exposing portions of the barrier layer on the top surface of the substrate after removing certain portions of the seed layer;

depositing the conductive material on the seed layer in the cavities of the substrate; and

positioning the pad material between 1 micron to 2 millimeters from the substrate during the depositing step.

38. (Currently Amended) ~~A method according to claim 1 further comprising the step of~~ A method for depositing a conductive material in cavities of a substrate having a barrier layer and a seed layer formed thereon, the method comprising the steps of:

removing certain portions of the seed layer from the top surface of the substrate using a pad material while preventing removal of other portions of the seed layer from the cavities of the substrate by applying an electric potential between the substrate and an electrode;

exposing portions of the barrier layer on the top surface of the substrate after removing certain portions of the seed layer;

depositing the conductive material on the seed layer in the cavities of the substrate; and

positioning the pad material on the substrate during the depositing step.

39. (Previously Presented) A method according to claim 38, wherein the pad material is positioned on the substrate at a pressure between 0.05 to 5 pounds per square inch.

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40. (Currently Amended) ~~A method according to claim 1 further comprising the step of A method for depositing a conductive material in cavities of a substrate having a barrier layer and a seed layer formed thereon, the method comprising the steps of:~~

removing certain portions of the seed layer from the top surface of the substrate using a pad material while preventing removal of other portions of the seed layer from the cavities of the substrate by applying an electric potential between the substrate and an electrode;

exposing portions of the barrier layer on the top surface of the substrate after removing certain portions of the seed layer;

depositing the conductive material on the seed layer in the cavities of the substrate; and

applying a first electric potential between the seed layer and an electrode having the pad material attached thereto, the first electric potential being applied during the step of preventing removal of other portions of the seed layer from the cavities of the substrate.

41. (Previously Presented) A method according to claim 40, wherein applying the first electric potential makes the seed layer more negative than the electrode.

42. (Previously Presented) A method according to claim 40 further comprising the step of applying a second electric potential between the seed layer and the electrode, the second electric potential being applied during the step of depositing.

43. (Previously Presented) A method according to claim 42, wherein the value of the second electric potential is greater than the value of the first electric potential.

Claims 44-46 (Canceled)